# **Kalle Matso**

Manager, Coastal Science Program

Piscataqua Region Estuaries Partnership (PREP)

University of New Hampshire

Phone: 603-781-6591 • E-Mail: kalle.matso@unh.edu

### PROFESSIONAL EXPERIENCE

Technology (CICEET), UNH

Director, Piscataqua Region Estuaries Partnership May, 2022 - Present Manager, Coastal Science Program, Piscataqua Region Feb., 2015 – April, 2022 Estuaries Partnership Affiliate Assistant Professor, Dept. Natural Resources March, 2014 – Present and the Environment, University of New Hampshire (UNH) Consulting Participatory Process Designer/Facilitator Jan. 2013 – Present Project Investigator, NERRS Science Collaborative, UNH Sept., 2009 – Feb., 2015 Project Investigator, Cooperative Institute for Coastal & Estuarine June, 2000 – Sept., 2009

### **EDUCATION**

Ph.D. 2012. University of New Hampshire; Natural Resources and Earth Systems Science. Dissertation Title = "Producing Science that Gets Used by Coastal Communities: What Funders Should Do to Link More Science with Decisions"

M.S. 2000. University of New Hampshire; Department of Natural Resources.

Thesis Title = "Beach Seine, SCUBA and Remote Video: A Comparison of Three Methods for Assessing Faunal Species Richness and Abundance in Eelgrass Beds"

B.A. 1989. The Colorado College; Department of English

## **AWARDS & HONORS**

The Nature Conservancy Conservation Partner Award	2019
National Estuarine Research Reserve System (NERRS) Impact Award:	2014
Outstanding Contribution to Coastal Stewardship	
Outstanding Achievement; Office of Vice President for Research, UNH	2012
Ketcham Award for Best Graduate Presentation	1999
New England Estuarine Research Society	
Reville Prize for Short Fiction (The Colorado College)	1989
Phi Beta Kappa	1989

#### **FUNDED RESEARCH**

Resilience and Positive Feedbacks: Water quality Management and 2021 - 2024

Eelgrass health in the Great Bay Estuary, NH/ME.

\$550,000 award from NERRS Science Collaborative.

NERRS Science Collaborative 2009 – 2014

Co-Investigator, National Coastal and Estuarine Research and

Technology Program. Awarded \$23 million from NOAA.

New England Sustainability Consortium (NEST) 2013 – 2015

Co-Investigator. Awarded \$6 million award from NSF.

ICNet: Generating and Translating New Knowledge for Sustainable 2014 – 2015

Transportation in a Changing Climate.

Steering Committee Member. \$750,000 Research Coordination

Network grant from NSF.

# PROFESSIONAL ACTIVITIES

### **Scientific Review Panel Moderator**

CICEET 2003 thru 2009

NERRS Science Collaborative 2009, 2010, 2011, 2012

NOAA RESTORE 2021

### Journal/Proposal Reviewer

North Carolina Sea Grant

National Sea Grant

National Park Service, Hurricane Sandy Mitigation Award

Environmental Management

Society and Natural Resources

Estuaries and Coasts

Journal of Community Engagement and Scholarship

### Scholarship/Fellowship Referee

North Carolina Research Reserve (Graduate Research Fellowship) 2011

Switzer Foundation Fellowship – Selection Process Interviewer 2014

NOAA Margaret Davidson Coastal Fellowship 2020

# Waquoit Bay National Estuarine Research Reserve 2011 - 2015Research to Application Task Force; Ocean Research and Resources 2006 - 2007 Advisory Panel, Interagency Committee on Ocean Science and Resource Management Integration **Public Service** Program Reviewer, Environmental Studies Program, Great Bay Spring, 2015 Community College Technical Advisor, Spruce Creek Association, Kittery Point, ME 2008 - Present President, Kittery Land Trust, (Kittery, Maine) 2015 - Present **Public Engagement Process Design** Piscataqua Region Estuaries Partnership/Great Bay National Estuarine 2013 Research Reserve Advisory Board Great Bay 2020: A Five-Year Vision for Collective Investment, Action, 2015 and a Healthy Watershed **Invited Workshop Participant** Heinz Center: "Improving Learning Networks in Coastal Management. 2003 Packard Foundation, Conservation & Science: Program Evaluation 2011 **Trainings Offered** Working Together to Get Things Done: Collaborative Learning for 2011 - 2012 Natural Resource Mgmnt (San Diego, CA; Monterey, CA; Falmouth, MA) Collaborative Learning and Collaborative Research 2012 NERRS Annual Meeting, Shepherdstown, W. Virginia The Resilience Dialogues: Wells National Estuarine Research Reserve 2018

**Advisory Boards/Steering Committees** 

### **PUBLICATIONS**

# **Refereed Journal Articles**

Trueblood D, S Almazán-Casali, J Arnott, M Brass, MC Lemos, K Matso, J Read, L Vaccaro & J Wondolleck. 2019. Advancing Knowledge for Use in Coastal and Estuarine Management: Competitive Research in the National Estuarine Research Reserve System, *Coastal Management*, DOI: 10.1080/08920753.2019.1598221

- Matso, KE and ML Becker. 2014. What Can Funders Do to Better Link Science with Decisions? Case Studies of Coastal Communities and Climate Change. *Environmental Management*. DOI 10.1007/s00267-014-0347-2
- Matso, KE and M Becker. 2013. Funding Science that Links to Decisions: Case Studies Involving Coastal Land Use Planning Projects. Estuaries and Coasts. DOI: 10.1007/s12237-013-9649-5
- Riley, C, KE Matso, D Leonard, J Stadler, D Trueblood and R Langan. 2011. How research funding organizations can increase application of science to decision making. Coastal Management. 39:336-350
- Matso, K.E., M.O. Dix, B. Chicoski, D.L. Hernandez, J.R. Schubel. 2008. Establishing A Minimum Standard for Collaborative Research in Federal Environmental Agencies. *Journal of Integrated Environmental Assessment and Management*. 4:362–368.
- Short, F.T., K.E. Matso, H.M. Hoven, J. Whitten, D.M. Burdick, and C.A. Short. 2001. Lobster use of eelgrass habitat in the Piscataqua River on the New Hampshire/Maine Border, USA. *Estuaries*. Vol. 24, No. 2, p. 277-284

# **Refereed Book Chapters**

Matso KE. 2012. Challenge of Integrating Natural and Social Sciences to Better Inform Decisions: A Novel Proposal Review Process. In, "Restoring Lands: Coordinating Science, Politics, and Action," Eds., H. Karl., M. Flaxman, JC Vargas-Moreno and PL Scarlett. Springer Publishing, Dordrecht, the Netherlands.

## **Commissioned Research Reports/Publications**

- Burdick, DM, Edwardson, KJ, Gregory T, Matso K, Mattera T, Paly M, Peter C, Short F and Torio D. 2020. A Case for Restoration and Recovery of Zostera marina L. in the Great Bay Estuary. *PREP Reports & Publications*. 441. https://scholars.unh.edu/prep/441
- Matso, KE. 2018. Flushing Time Versus Residence Time for the Great Bay Estuary. PREP Reports & Publications. 413. https://scholars.unh.edu/prep/413
- Matso, KE. 2015. Adaptive Governance. In, "Encyclopedia of Estuaries," Ed. MJ Kennish. Springer Publishing, Dordrecht, the Netherlands.
- Matso, KE. 2015. Participatory Research. In, "Encyclopedia of Estuaries," Ed. MJ Kennish. Springer Publishing, Dordrecht, the Netherlands.
- Research to Applications Task Force. 2007. Best practices for increasing the impact of research investments. A report to the Ocean Research and Resources Advisory Panel. <a href="http://www.nopp.org/wp-content/uploads/2010/06/or03.pdf">http://www.nopp.org/wp-content/uploads/2010/06/or03.pdf</a>

# Member, Masters or PhD Committees

Lowien, Anna. Biogeochemical stressors and ecological response in Great Bay Estuary. Masters Thesis,
Department of Natural Resources and the Environment, University of New Hampshire.

(Anticipated Completion Date: 2021)

Erickson, Molly. Seasonal Variability of Phytoplankton Population Dynamics in Coastal New Hampshire. Masters Thesis, Department of Natural Resources and the Environment, University of New Hampshire. (Anticipated Completion Date: 2023)

### Dissertation

Matso, KE. 2012. Producing science that gets used by coastal communities: What funders should do to link more science with decisions. University of New Hampshire.

<a href="https://scholars.unh.edu/dissertation/699/">https://scholars.unh.edu/dissertation/699/</a>

#### **PRESENTATIONS**

# **Invited Presentations, Lectures**

- Matso, KE. 2019. New England Estuarine Research Society. "Surviving the Thunderdome of Environmental Conflict." York, ME.
- Matso, KE. 2018. NH Water and Watershed Conference. "Improving Resilience in a Time of Disturbance." Plymouth, NH.
- Matso, KE. 2017. "State of Our Estuaries 2018." State of Our Estuaries Conference, Dec., 2017. Portsmouth, New Hampshire.
- Matso, KE. 2016. International Low Impact Development Conference. Invited Presentation. "Wicked Problems, the Trust Model and Spanning the Boundary Between Science and Action" Portland, Maine.
- Matso, KE. 2016. New England Estuarine Research Society. Invited Presentation. "Cultivating New Roles in Collaborative Research: Scientists, Trust and Impact" York, Maine.
- Matso, KE. 2015. New England Estuarine Research Society. Invited Presentation. "Increasing How Much Science Influences Decision Making: Is It a Science or an Art?" Bristol, RI.
- Matso, KE. 2011. NERRS Winter Sector Meeting. Invited Presentation. "Funding Decision-Relevant Science: Overview of the Collaborative Approach." Falmouth, MA.
- Matso, KE. 2010. NOAA Center for Sponsored Coastal Ocean Research. "Funding Decision-Relevant Science: Overview of a New Approach" Virtual Presentation. Durham, NH.
- Matso, KE. 2010. NERRS Annual Meeting. Invited Presentation. "Lessons Learned from the First Year of the NERRS Science Collaborative." Shepherdstown, West Virginia.
- Matso, KE. 2009. Aquarium of the Pacific. "Supporting More Useful Science: New Methods for Designing, Implementing and Assessing Applied Coastal Research." Long Beach, CA.
- Matso, KE. 2009. NOAA Social Science Committee. "CICEET and Social Science: Efforts to Increase Impact of Research Investments." Washington D.C.
- Matso, KE. 2008. NOAA Research Council. "Increasing Impact of Research Investments: Assessing New Models." Washington D.C.

- Matso, KE and R. Langan. 2006. Ocean Resources Research Advisory Panel. "Catalytic Investments in Research and Technology: Providing Tools and Knowledge for Coastal Management." Washington D.C.
- Matso, KE. 2003. Heinz Center Workshop on Improving Learning Networks in Coastal Management. "Using Web-Based Databases for More Efficient Dissemination of Federally Funded Research Results." Heinz Center, MA.
- Matso, KE. 1999. Wood's Hole Visiting Scientist Series. "Beach Seine, SCUBA, and Remote Video: a Comparison of Three Methods for Assessing Faunal Species Richness and Abundance in Eelgrass Beds." Woods Hole, MA.

# **Conference Sessions Organized**

- Coastal Estuarine Research Federation (CERF) 2013. "Linking Knowledge with Action: Empirical Evidence of What Works and What Doesn't."
- Association for the Sciences of Limnology and Oceanography (ASLO) 2013. "Catapults, Ferries, and Bridges: Getting Aquatic Science Results to Policy and Management." Organizers, E. Turner, D. Trueblood, K. Matso, F. Martinez.
- Coastal Zone. 2009. "Applying Land Use Technology in Coastal Communities." Boston, MA.
- Coastal Zone. 2009. "Building Capacity for Collaborative Decisions, Resilient Ecosystems, and Sustainable Practices: Water, land, community and people in estuarine watersheds." Boston, MA

## **Conference Presentations**

- Matso, KE. 2016. Low Impact Development Conference. Invited Presentation. "Wicked Problems, the Trust Model and Spanning the Boundary Between Science and Action." Portland, Maine.
- Matso, KE. 2012. NERRS Annual Meeting. "From Collaboration, to Communication to Translation: Case Studies of Integrating Stakeholders into Research for More Usable Science Products." Shepherdstown, West Virginia.
- Matso, K.E. 2010. Research Funding Program Implementation and Impact Evaluation. Concurrent Session Presentation. Environmental Evaluators Network Meeting. June, 2010. Washington D.C.
- Matso, K.E., J. Stadler, D. Leonard. 2008. "Effectively Linking land use research to decision making: a case study in federal funding program design." Proceedings of the 21st International Conference for the Coastal Society.

## Invited Lectures, Presentations - College Level

- Graduate Student Presentation Series. Natural Resources and Earth Systems Science Department. 2012. "Funding Decision-Relevant Science: An analysis of a new approach." Univ. of New Hampshire.
- Sustainable Engineering; Civil Engineering Department. 2012, 13. "What to Be Aware of Regarding Participatory Processes and Engineering Planning." Univ. of New Hampshire.

Sustainability and Adaptation. Natural Resources and Earth Systems Science Department. 2012. "The NERRS Science Collaborative: Not the Usual Funding Source." Univ. of New Hampshire.

Grant Writing (for Sciences and Natural Resource Management). 2013, 14. Univ. of New Hampshire.

Natural Resource Co-Management: How Do We Make It Work?. 2013. Graduate seminar. University of Maine, Orono.

Environmental Policy, Natural Resources and the Environment, Undergraduate Class. "The Role of Science in Making Policy." 2014

## **TEACHING**

Co-Instructor. Natural Resources and the Environment, University of New Hampshire. NR 915: TIDES Seminar: Coastal Challenges for Science-Policy Collaborations (2010, 2011, 2012)

Program Co-Developer. Training for the Integration of Decisions and Ecosystems Science (TIDES).

Instructor, "Environmental Factors in Development Practice," Master of Arts in Community
Development Policy and Practice; UNH, Carsey Institute. 2013, 2015

Guest Lecturer. UNH Courses: Marine Pollution; Watershed Management; Science Grant Writing